Better Gardens

BEING a number of extracts from the book **"Garden Guide & Record,"** which is published by Peter Henderson & Co. for the use of their customers. 68 pages of compact, concise garden information in a convenient form. It is sent without charge with all orders of two dollars and over.

PETER HENDERSON & CO.
SEEDSMEN
35-37 Cortlandt St., New York City

"Better Gardens"

FOR the past few years a large part of our advertising campaign has been devoted to the urging of "more gardens," to pointing out the economic value of the home garden plot. We have hoped that these new gardens would be largely "Henderson Gardens," but we have tried to make our appeal as far as possible impersonal. The campaign which we started seven years ago, single-handed, has had wonderful help from time to time from the various publications and organizations until at the present-time it is a nation-wide effort of tremendous value as a whole.

We believe that today the rallying slogan should be changed. From now on it should be not only "More Gardens," but "Better Gardens"—and our intensive work is being done along those lines and toward that end.

As a part of this work we are printing this booklet, but it is not alone improving your methods that will give you the bigger and better results. You must be sure of the quality of the seed you plant. The smallest item of expense in your garden is the cost of the seed, but it is very easily the most important, and upon the quality of your seeds the success or failure of your garden largely depends. Be sure you have started right by getting the best seeds you can. As for Henderson's seeds—Every packet has behind it the accumulated experience of seventy one years of successful seed raising, testing and selling, and all of this is at the service of our customers. Henderson's are Tested Seeds in all that the name implies.

PLANNING THE VEGETABLE GARDEN

It is impossible to plan specific gardens suited to all locations, but a few of the principles of correct garden practice may prove suggestive to those planning individual gardens.

ARRANGEMENT OF THE VEGETABLE GARDEN. The old style method of raised plots or beds, often bordered with grass, parsley or some dwarf edging plant makes a pretty garden but requires more time and labor to plant, cultivate and keep in order than a garden planted on the level and thereby make the most of the ground and get maximum results with a minimum of labor. The rows if practicable should run nearly north and south thus getting the full benefit of the forenoon sun on the east side of the rows and the afternoon sun on the opposite side and for the same reason tall growing plants: Corn, Peas, Pole Beans, Tomatoes, etc., should be planted north of the dwarf crops so development of the latter will not be retarded nor restricted by shade.

Perennial crops, those that remain in the ground year after year, such as Asparagus, Rhubarb, Artichokes, Chives, Herbs, Mint, Seakale, fruit plants, etc., should be grown at one end or side of the garden and not be jumbled promiscuously anywhere, thus likely interfering with soil manipulation for the annual vegetables and their situations for proper rotation. Another thing to be considered is the placing of rowed crops requiring the same distances between rows in continuous succession lengthwise of the garden preferably, and as free from paths across the rows as possible so the wheel hoe and cultivator may be advantageously used before being altered for rows of a different width. It may be stated here that a good hand power wheel hoe with its accessories is now considered an almost indispensable adjunct to up-to-date gardening operations. With one the work can be accomplished five times faster than with a hand hoe, much better and with greater ease; with a wheel hoe the drudgery of gardening is changed to pleasant and healthful recreation.

Another advantage of planting your garden on the level is the more even distribution of water. In raised beds or ridged rows the rain or water from the hose runs off and away from the plants which perhaps may be needing moisture badly. Then on the level and with a wheel hoe the surface of ground that crusts after a rain can be promptly and quickly stirred, thus forming a soil mulch which checks evaporation and conserves the underground moisture.

If part of the land is low and moist such crops as Celery, Onions and late Cucumbers should be grown there, and if another portion is high, warm and dry that is the place for early vegetables that need quick, warm soil.

To get the greatest amount of vegetable products throughout the season from the garden area, Companion and Succession planting is the correct practice.

COMPANION VEGETABLE CROPS are two or more kinds of early (quick) and later maturing vegetables that work well together planted on the same piece of ground. As the quick-growing sorts are removed, the later, slower-growing vegetables develop and occupy the ground.

Our "Table for Vegetable Seed Sowers" on page 8, may be referred to as a guide to the length of time various kinds require to be ready to use. From this, Companion Crops may be planned, such as Radish and Lettuce between Cabbages and Cabbage rows. The Radish being ready first, gives room for the Lettuce and after the Lettuce is removed the Cabbage will occupy the ground. Other suggestive Companion Vegetable Crops are, early Beets or Bush Beans with Melons, Squash or Cucumbers, or dwarf early Peas, summer Onions, etc., between rows of Celery which will not require "earthing up" before the summer crops are removed. Radish may be sown with Beets, Onions, Carrots, etc., the Radish being ready first will give room for the slower growing succeeding crop, etc., etc.

SUCCESSION VEGETABLE CROPS are so planned that late or fall-maturing sorts follow on the same ground early or summer-maturing vegetables. Late Cabbage, Cauliflower, Lettuce or Celery from the seed bed may take the place of early Bush Beans, Beets, Lettuce, Peas, etc., or some quick-growing vegetables may be sown after the early ones have been removed—as early Sweet Corn, Cucumbers for Pickles, Turnips, Bush Beans, etc.

Many examples of Companion and Succession Vegetable Crops could be given but the above will suffice, as suggestions in planning to suit your own garden and requirements

GARDEN GROUND PREPARATION

Draining, Fertilizing, Cultivating, Etc.

LOCATION. Choose, if possible, a level location, or if there be a slope, it should be toward the south. A wind break—hedge, board fence or wall—on the north and northwest, facilitates earliness of crops.

SOIL. The soil for at least a foot in depth should be prepared so that it will be rich, mellow and friable. This is accomplished by adding humus, which increases the moisture-holding, food-dissolving capacity of soil. Leaf-mold and rotted stable manure form ideal humus, but where the former is not available, a crop of crimson clover sown the summer or fall before and turned under with manure in the spring, answers equally well.

UNDER-DRAINAGE. This differs from surface drainage and is much better than the latter, because it permits water to percolate through the soil, which absorbs the needed quantity of moisture to hold the plant foods in solution and in assimilable condition for the feeding roots, the surplus water being stored or discharged below. If the subsoil be gravelly or sandy—nature's drain—no further attention need be paid to this question, but if the subsoil is stiff clay, it should be drained either by placing continuous lines of drain tiles or △-shaped board drains 3 feet below the surface and not farther than 18 feet apart, all sloping slightly to an outlet.

HOLE IN THE GROUND DRAINAGE. An effective makeshift for tile or other drainage for wet, low lying spots in a garden is made by digging holes 3 or 4 feet deep here and there and filling half full with stones, then fill up with top soil, then there will be no interference with the crops. The size of holes and the distances apart will differ according to circumstances.

PLANT-FEEDING. To grow vegetables to perfection, a liberal quantity of plant food must be incorporated with the soil. Both stable manure and commercial fertilizer should be used, the manure to improve the mechanical condition of the soil, and the fertilizer to supply any lacking essential in potash, nitrogen or phosphoric acid. On a quarter-acre garden 10 to 12 cords of manure is not too much to plow or dig in with 100 to 200 pounds of a well-balanced, high-grade commercial fertilizer, harrowed or raked in. Rowed crops may be further stimulated during growth by two or three supplementary side dressings of fertilizer, applied at the rate of 100 to 200 pounds per acre at each application.

CULTIVATION. Garden crops require frequent cultivation, especially in dry weather, the object being not only to destroy weeds, but what is of more importance to conserve the soil's moisture by keeping the surface crust broken and pulverized, thus forming an "earth mulch" which checks evaporation. If the garden is planted in straight rows and on the level—that is, no raised beds—a handpower wheel-hoe may be utilized in cultivation, thus reducing the work to a minimum of speed and labor.

FIRM SOIL WITH THE FEET IN SOWING AND PLANTING. Firm the soil over seeds as soon as sown and about plants when set out providing the soil is mellow and dry, NOT when damp and sticky. This firming of the soil is very important, for it brings soil particles in contact with seeds and roots, prevents them from drying out, and facilitates quick growth. The best way to firm the soil in gardens is with the feet; tread every inch of the row, after which the surface soil may be leveled and "earth mulch" formed with a short-toothed rake. In larger operations, as in market gardens, truck farms with field crops, the same results are obtained with a roller and smoothing-harrow.

When plants are set out, whether vegetables, flower, shrub or tree, firm the soil over their roots by thorough treading, without which they are liable to wabble with every wind, permitting too much air to penetrate and dry the loose soil, wither the roots and cause the subject to languish.

To emphasize the importance of firming seeds and plants in the soil we quote from the late Peter Henderson's article on the subject, viz.: "On one occasion as an experiment, I sowed 12 rows of Sweet Corn and 12 rows of Beets, treading in, after sowing, every alternate row of each. In both cases, those trod in came up in 4 days, while those unfirmed remained 12 days before starting, and would not then have germinated had not rain fallen, for the soil was dry as dust when the seed was sown.

"The result was that the seeds that had been trodden in grew freely from the start and matured their crops by fall; while the rows unfirmed did not mature, as they were not only 8 days later in germinating, but the plants were also, to some extent, enfeebled by being partially dried in the loose, dry soil.

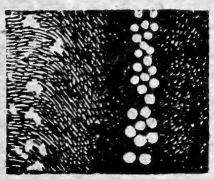
"This experiment was a most useful one, for it proved that Corn, sown in the vicinity of New York as late as July, could be made to produce "roasting ears" in October, but the crop would not mature unless the seed germinated at once, and which would never be certain at that dry and hot season, unless by this method.

"The same season, in August, I treated seeds of Turnips and Spinach in the same way. Those trod in germinated at once and made an excellent crop, while those unfirmed germinated feebly, and were eventually nearly all burned out by a continuance of dry, hot air penetrating through the loose soil to the tender rootlets.

"I beg to caution the inexperienced, however, by no means to tread or roll in seed if the ground is **not dry.** The soil may often be in a suitable condition to sow, and yet be too damp to be trodden upon or rolled. In such cases these operations may not be necessary at all, for if rainy weather ensue, the seeds will germinate, of course; but if there is any likelihood of a continued draught, the treading or rolling may be done a week or more after the seed has been sown, if there is any reason to believe that it may suffer from the dry, hot air.

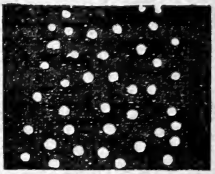
"Now, if firming the soil around seed, to protect it from the inflence of a dry and hot atmosphere, is a necessity, it is obvious that it is more so in the case of plants whose rootlets are even more sensitive to such influence than the dormant seed; the plant, in nine cases out of ten, is left loose and waggling; the dry air penetrates through the soil to its roots; the winds shake it; it shrivels up and fails to grow."

THE RIGHT AND WRONG WAYS OF SOWING SEEDS IN GARDEN DRILLS



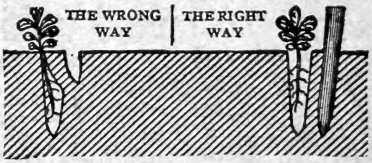
THE WRONG WAY

Make the drills with a flat bottom 2 to 3 inches in width and scatter the seeds over the surface, so that every developing seedling may have at least a little feeding ground, and not be starved, out in a "survival of the fittest" struggle as many are when seeds are huddled together in a V-shaped furrow. A little more time and care when sowing seeds, saves much time and labor in thinning, and in the thinning of well-scattered seedlings, those removed do not so disturb those that remain.



THE RIGHT WAY

TRANSPLANTING VEGETABLE CROPS



In cool, northern climates where some vegetables are wanted early, it is the custom to start the seeds in a protected or glass-covered seed bed and from here transplant the seedlings as soon as they are large enough to handle—and when they begin to crowd one another. These seedlings should be transplanted 1 to 2 inches apart in another seed bed where they can "harden off" before being planted out in the open garden. In the operation of transplanting, care should be used that the roots are placed down in the hole and not curled up towards the neck of the plant and also be sure that the earth is closed against the roots for their whole length, for an air space left at the bottom of the hole is likely to cause the rootlets to wither and the plant to languish (see explanatory illustration). Some vegetable plants are greatly benefited by one or more transplantings which causes a busyh growth of roots—among these are notably Cabbage, Cauliflower, Celery, Lettuce, Tomatoes, etc. Some other kinds are difficult to transplant and are best transferred from the seed bed to paper pots or other receptacles so they may be grown individually and be planted in the open garden with but little disturbance of the root system—among these "hard to transplant" vegetables are Beans, Cucumbers, Melons, Squash, etc.

Before removing seedlings from the seed bed for transplanting it is advisable to water them thoroughly a little while before lifting so the soil may settle and adhere to the roots when taken up; this also softens the soil so there is less loss of rootlets and the plants are not so liable to wilt. It is also a good practice to shear off from one-fourth to one-third of the tip ends of the foliage, especially such plants as may be a little drawn and "leggy." Should the ground and weather be dry the newly set out plants should be at once watered—and possibly shaded—with a plant protector or paper or even a shingle thrust in the ground.

WATERING THE GARDEN

All crops and particularly succulent vegetables require great quantities of water to enable them to attain capacity size at maturity. It is estimated that from 50 to 100 times their (green) weight in water with accompanying dissolved plant foods is conveyed through their roots to all portions of the plant and then discharged into the air through transpiration and evaporation. To make good this loss of water when the rainfall is inadequate it is necessary to apply water artificially and as needed to prevent any check in plant growth. There are several methods of applying water depending largely upon the supply. Irrigation through open ditches and laterals; sub-irrigation through tiles laid underground, etc., but the most extensively practised method is through piping laid either below ground or above with frequent connections for hose; also portable pipes are largely used with small spray nozzles fitted in 3 or 4 feet apart. Whatever method is employed, it is a good investment, insuring a crop in dry seasons. When water is applied it should go on gently but in sufficient volume to percolate to the extremities of root growth and moisten the ground thoroughly all the way down. One such watering a week is much more effective than a light sprinkling daily which only refreshes the upper roots and keeps them growing towards the surface. Roots should be induced to grow downward as much as possible where temperature and moisture conditions are more equable. For further information on this subject, see "Rainfall and the Quantity of Water Crops Require," in the "Garden Guide and Record."

READY REFERENCE TABLE FOR VEGETABLE SEED SOWERS

Number of plants thinned or transplanted* to grow on 100 Ft. of Row	Apart in Row	Rows Apart	Depth to Cover	Quantity of Seed for Length of Row and No. of Plants	Days to "Come Up"	Ready to Use from Seed Sowing
ARTICHOKE, French	50 plts*	2 ft.	3 to 4 ft.	½ in.	300 to oz.		8 to 12 mo.
ASPARAGUS, Seeds	600 "	2 in.	2 ft.	¾ in.	1oz. for 500 plts.	20 to 28	3 to 4 yrs.
" Roots	100 rts.*	1 ft.	3 ft.	3 in.			2 years
BEANS, Dwarf or Bush	300 plts.	4 in.	2½ ft.	2 in.	1 qt. to 100 ft.	6 to 10	6 to 8 wks.
" " Limas	200 "	6 in.	2½ ft.	1 in.	1 pt. to 100 ft.	6 to 10	12 to 15 "
" Pole	33 hills.	3 ft.	4 ft.	2 in.	1 qt. to 150 hills	6 to 10	8 to 10 "
" " Limas	33 "	3 ft.	4 ft.	1 in.	1 qt. to 100 hills	6 to 10	16 to 18 "
BEETS, Early and Summer	300 plts.	4 in.	1 ft.	1 in.	1 oz. to 50 ft.	7 to 10	6 to 8 "
" Fall and Winter	300 "	4 in.	1 ft.	1 in.	1 oz. to 50 ft.	7 to 10	7 to 9 "
BROCCOLI	50 "	*2 ft.	2½ ft.	½ in.	1oz. to 2000 plts.	6 to 10	16 to 18 "
BRUSSELS SPROUTS	67 "	*1½ ft.	2½ ft.	½ in.	1oz. to 2000 plts	6 to 10	16 to 18 "
CABBAGE, Early and Summer	67 "	*1½ ft.	2 ft.	½ in.	1oz. to 2000 plts.	6 to 10	13 to 16 "
" Fall and Winter	40 "	*2½ ft.	2½ ft.	½ in.	1oz. to 2000 plts.	6 to 10	17 to 20 "
CARROT, Early and Summer	400 "	*3 in.	1 ft.	½ in.	1 oz. to 125 ft.	10 to 15	8 to 9 "
" Fall and Winter	300 "	4 in.	1½ ft.	½ in.	1 oz. to 150 ft.	10 to 15	12 to 14 "
CAULIFLOWER, Early and Summer	50 "	*2 ft.	2½ ft.	½ in.	1oz. to 2000 plts.	6 to 10	14 to 15 "
" Fall and Winter	40 "	*2 ft.	2½ ft.	½ in.	1oz. to 2000 plts.	6 to 10	16 to 18 "
CELERY, Early Fall	200 "	*6 in.	3 ft.	¼ in.	1oz. to 3000 plts	12 to 20	18 to 20 "
" Late Fall and Winter	200 "	*6 in.	3 to 5 ft.	¼ in.	1oz. to 3000 plts.	12 to 20	20 to 22 "
CELERIAC	200 "	*6 in.	1½ ft.	¼ in.	1oz. to 3000 plts	12 to 20	20 to 22 "
CORN, SWEET, Early Small	33 hills.	3 ft.	3 ft.	1 in.	1 qt. to 200 hills	8 to 10	8 to 9 "
" " Mid-Season	33 "	3 ft.	4 ft.	1 in.	1 qt. to 200 hills	8 to 10	9 to 10 "
" " Late	33 "	3 ft.	4 ft.	1 in.	1 qt. to 200 hills	8 to 10	11 to 12 "
CORN SALAD (Fetticus)	400 plts.	3 in.	1 ft.	½ in.	1 oz. to 200 ft.	10 to 12	8 to 10 "
COLLARDS	40 "	*2½ ft.	3 ft.	½ in.	1oz. to 2000 plts.	6 to 10	13 to 16 "
CRESS, GARDEN	2400 "	½ in	1 ft.	¼ in.	1 oz. to 100 ft.	4 to 5	4 to 5 "
" WATER	400 "	3 in.	½ ft.	¼ in.	1 oz. to 200 ft.		
CUCUMBER	25 hills.	4 ft.	4 ft.	½ in.	1 oz. to 60 hills	6 to 8	8 to 10 "
DANDELION	400 plts.	3 in.	1 ft.	½ in.	1 oz. to 200 ft.	10 to 12	8 to 9 "
EGG PLANT	50 "	*2 ft.	2½ ft.	½ in.	1oz. to 1000 plts	10 to 14	19 to 20 "
ENDIVE	100 "	*1 ft.	1 ft.	½ in.	1oz. to 3000 plts.	6 to 10	10 to 12 "
HORSE RADISH	100 rts.*	1 ft.	2 ft.	2 in.			18 to 20 "
KALE (Borecole)	50 plts*	2 ft.	2 ft.	½ in.	1oz. to 2000 plts.	6 to 10	10 to 12 "
KOHL RABI	100 "	*1 ft.	2 ft.	½ in.	1oz. to 2000 plts.	6 to 8	9 to 11 "
LEEK	300 "	4 to 6 in.	1½ ft.	½ in.	1 oz. to 100 ft.	8 to 12	14 to 16 "
LETTUCE, Early Curled	100 "	1 ft.	1½ ft.	¼ in.	1oz. to 3000 plts.	6 to 10	6 to 7 "
" " Head	100 "	*1 ft.	1½ ft.	¼ in.	1oz. to 3000 plts.	6 to 10	9 to 12 "
" Fall Head and Cos	100 "	*1 ft.	1½ ft.	¼ in.	1oz. to 3000 plts.	6 to 10	10 to 14 "
MELON, MUSK	25 hills.	4 ft.	4 ft.	¾ in.	1 oz. to 60 hills	6 to 10	11 to 14 "
" WATER	12 "	8 ft.	8 ft.	¾ in.	1 oz. to 30 hills	8 to 12	15 to 16 "
MUSTARD Several sowings in	2400 plts	½ in	1 ft.	¼ in.	1 oz. to 100 ft.	4 to 5	4 to 5 "
OKRA	50 "	*2 ft.	3 ft.	1 in.	1 oz. to 250 plts.	15 to 20	10 "
ONION, Seed	400 "	3 in.	1 ft.	½ in.	1 oz. to 100 ft.	8 to 12	16 to 20 "
" Sets	400 "	*3 in.	1 ft.	¼ in.	1 qt. to 50 ft.	6 to 8	5 to 6 "
PARSLEY	600 "	2 in.	1 ft.	½ in.	1 oz. to 150 ft.	18 to 24	12 to 14 "
PARSNIP	200 "	6 in.	1½ ft.	½ in.	1 oz. to 200 ft.	12 to 18	16 to 20 "
PEAS, Dwarf Early	600 "	2 in.	2 ft.	2 in.	1 qt. to 100 ft double drill; 1 qt. to 200 ft.	6 to 10	8 to 9 "
" Mid-Season	600 "	2 in.	3 ft.	2 in.		6 to 10	9 to 10 "
" Main Crop	600 "	2 in.	4 ft.	2 in.	single drill.	6 to 10	11 to 12 "
PEPPER	50 "	*2 ft.	2½ ft.	½ in.	1oz. to 1000 plts.	10 to 14	18 to 20 "
POTATOES, Early	120 "	*10 in	3 ft.	4 in.	10 to 12 bu. per acre	15 to 25	10 to 12 "
" Main Crop	33 hills*	3 ft.	3 ft.	4 in.	1 peck to 125 hills	15 to 25	14 to 16 "
" Sweet	100 plts*	1 ft.	3 ft.				19 to 20 "
PUMPKIN	12 hills.	8 ft.	8 ft.	1 in.	1 oz. to 30 hills	6 to 10	13 to 15 "
RADISH Early Round	1200 plts	1 in.	1 ft.	½ in.	1 oz. to 100 ft.	4 to 6	4 to 5 "
" Long and Summer	600 "	2 in.	1 ft.	½ in.	1 oz. to 100 ft.	4 to 6	5 to 6 "
" Winter	300 "	4 in.	1½ ft.	½ in.	1 oz. to 150 ft.	4 to 6	8 "
RHUBARB	33 rts.*	3 ft.	3 ft.	¾ in.	1 oz. to 500 ft.	12 to 14	3 years
RUTA BAGA	200 plts.	6 in.	3 ft.	½ in.	1 oz. to 150 ft.	4 to 7	12 to 16 wks.
SALSIFY	200 "	6 in.	1½ ft.	½ in.	1 oz. to 75 ft.	8 to 12	18 to 20 "
SPINACH	300 "	4 in.	1 ft.	½ in.	1 oz. to 100 ft.	6 to 12	8 to 9 "
" New Zealand	67 "	1½ ft.	3 ft.	1 in.	1 oz. to 250 plts	14 to 16	12 "
SQUASH, Bush	25 hills	4 ft.	4 ft.	1 in.	1 oz. to 50 hills	6 to 10	7 to 8 "
" Vine	12 "	8 ft.	8 ft.	1 in.	1 oz. to 16 hills	6 to 10	9 to 12 "
SWISS CHARD	200 plts.	6 in.	1½ ft.	1 in.	1 oz. to 75 ft.	7 to 10	6 to 8 "
TOMATO	33 "	*3 ft.	3 ft.	½ in.	1 oz. to 1500.	6 to 10	15 to 18 "
TURNIP, Early	300 "	4 in.	1½ ft.	½ in.	1 oz. to 150 ft.	4 to 7	8 to 10 "
" Fall and Winter	200 "	6 in.	1½ ft.	½ in.	1 oz. to 150 ft.	4 to 7	10 to 12 "
WITLOOF, For Winter Roots	200 rts.*	6 in.	1½ ft.	½ in.	1oz. to 3000 plts.	6 to 10	6 to 8 mo.

The Vegetable Garden Time Table

For SOWING and PLANTING AROUND NEW YORK CITY

VEGETABLES	Hardiness and Best Germinating Temperature	Sow in Greenhouse (H.B.) or Cold Frame (C.F.)	Sow in Hot Bed or open Seed Bed (S.B.)	Sow in Garden Rows or Frame or Seed Bed. Cold	Transplant to Garden from Hot Bed. Cold	Supplementary sowings for succession and also Fall or Winter use.
ARTICHOKE, Globe	Half H. 60°	Feb. or Mar. H.B.			May or June	
ASPARAGUS, Seeds and Roots	Hardy 60°			Apr. or May	Mar. or Apr.	
BEANS, Dwarf or Bush	Tender 70°			Middle May		Every 2 wks. to Sept.
" Pole and Limas	" 75°			Late May		
BEETS	Hardy 60°			Apr. or May		July
BROCCOLI	" 60°	Feb. or Mar. C.F.			June or July	Early June
BRUSSELS SPROUTS	" 60°			Early June, S.B.	July	
CABBAGE	" 60°	Feb. or Mar. C.F.			Apr. or May	Early June
CAULIFLOWER	" 60°	" " C.F.			" "	" "
CARROT	" 60°			Apr. or May		July
CELERY & CELERIAC	" 60°			April S.B.	July	
CORN, SWEET	Tender 70°			Middle May		Every 2 wks. to July
CORN SALAD OR FETTICUS	Hardy 60°			Apr. or May		Aug. or Sept.
COLLARDS	" 60°	Feb. or Mar. C.F.			Apr. or May	Early June.
CRESS, GARDEN	" 60°			Apr. or May		Every 2 wks. to Sept.
" WATER	" 60°			" "		August
CUCUMBER	Tender 75°			Middle May		July
DANDELION	Hardy 60°			Apr. or May		
EGG PLANT	Tender 75°	Mar. or Apr. H.B.			Late May	
ENDIVE	Hardy 60°	Mar. or Apr. C.F.		Apr. or May	Apr. or May	July
KALE OR BORECOLE	" 60°	Feb. or Mar. C.F.			" "	June
KOHL RABI	" 60°	" " C.F.		Apr. or May	" "	July
LEEK	" 60°	" " C.F.		" "	" "	
LETTUCE	" 60°	" " C.F.		" "	" "	August
MARTYNIA	Tender 70°			May or June		
MELON	" 75°			Middle May		
MUSTARD	Half H. 60°			Apr. or May		Every 2 wks. to Sept.
OKRA	Tender 75°			Late May		
ONION, Seed	Hardy 60°	Feb or Mar. C.F.		Apr. or May	Apr. or May	
" Sets	" 60°				" "	
PARSLEY	" 60°			Apr. or May		
PARSNIP	" 60°			" "		
PEAS	" 60°			" "		July or Aug.
PEPPER	Tender 75°	Mar. or Apr. H.B.			Late May	
POTATOES	Hardy 60°				Apr. or May	June
" Sweet	Tender 75°	Tubers H.B. Apr			June	
PUMPKIN	" 75°				Middle May	
RADISH	Hardy 60°			Apr. or May		Every 2 wks. to Sept.
" Winter	" 60°			July		August
RUTA BAGA	" 60°			Apr. or May		June
SALSIFY	" 60°			" "		
SORREL	" 60°			" "		Aug. or Sept.
SPINACH	" 60°			" "		" "
" New Zealand	Half H. 70°			" "		
SQUASH	Tender 70°			Late May		
SWISS CHARD	Hardy 40°			Apr. or May		Every mo. to Sept.
TOMATO	Tender 75°	Mar. or Apr. H.B.			May	
TURNIP	Hardy 60°			Apr. or May		July & Aug.
WITLOOF, for Winter Roots	" 60°			" "		

THE HARDY AND COOL WEATHER VEGETABLES

The seeds of which may be sown, or the plants set out very early, even before the last of the light frosts are over:

Asparagus, Beet, Broccoli, Brussels Sprouts, Cabbage, Carrot, Cauliflower, Celeriac, Celery, Corn Salad, Cress, Endive, Kale, Kohl Rabi, Leek, Lettuce, Onion, Parsley, Parsnip, Peas, Potatoes, Radish, Rhubarb, Salsify, Spinach, Turnip and Witloof.

THE TENDER AND WARM WEATHER VEGETABLES

The seeds of which should not be sown in the open, nor the plants set out until both weather and ground are settled and warm:

Beans, Corn, Cucumber, Egg Plant, Melon, Okra, Pepper, Pumpkin, Squash, Sweet Potato and Tomato.

Page 15 of the Garden Guide and Record gives other sections of the country.

SUBURBAN GARDEN

THESE COLLECTIONS WILL BE FOUND ON OPPOSITE PAGE

Cultural Suggestions on the Suburban Garden Shown on Page 8

When Peas are through bearing same space can be made ready to plant two rows of Celery.

When Corn is through bearing this space can be replanted with Endive out of temporary seed bed.

When Bush Beans are through bearing the space can be replanted with late Cabbage out of temporary seed bed.

Between late Corn, transplant early Lettuce; with use of manure water same can be forced and got out of the way before Corn is too high.

By sowing Radish with the Beets and Carrots it marks the row where they are, and can be easily pulled out when ready to use and do no harm to other crops.

Between the Musk Melon hills set out one plant early Cabbage from temporary seed bed, and between the Water Melon hills set out two plants early Cabbage from temporary seed bed.

Musk and Water Melons will run into Beet and Carrot rows by the time these are ready for use.

New York Lettuce can be transplanted between hills of Pole Beans; the shade from the Beans will do no harm; in fact will help the Lettuce by shading.

Cucumber vines will use space planted with Lettuce and Spinach after they are used up or taken off.

Bush Squash will be through bearing by the time Tomatoes need the extra space.

The Celery, Cabbage and Endive will be transplanted into permanent place by the time Tomatoes will need the space.

The "SUBURBAN GARDEN" Collection

1 pt.	**Beans, Valentine.** The standard dwarf early green pod snap.
1 pt.	" **Golden Wax.** Dwarf yellow or wax podded snap.
1 pkt.	" **Bush Lima.** "The Henderson," early and prolific.
1 pkt.	" **Old Homestead.** The finest green-podded pole snap.
1 pkt.	**Beet, Eclipse.** Extra early, round, red table Beet.
1 pkt.	**Cabbage, Early Jersey Wakefield.** The standard extra early.
1 pkt.	" **Selected Late Flat Dutch.** The finest large Cabbage grown.
1 pkt.	**Carrot, Early Scarlet Horn.** An extra early table Carrot.
1 pkt.	**Celery, Perfected White Plume.** The best early self-blanching.
1 pkt.	**Corn, Sweet, Cory.** An extra early, small but prolific.
1 pkt.	" **Stowell's Evergreen.** The popular late sort.
1 pkt.	**Cucumber, "Henderson" White Spine.** The finest for slicing.
1 pkt.	**Endive, Green Curled.** The delicious and popular Salad.
1 pkt.	**Leek, Large Flag.** Large, white and mild.
1 pkt.	**Lettuce, Salamander.** Unsurpassed second early head Lettuce.
1 pkt.	" **New York.** Large and fine main crop, heading variety.
1 pkt.	**Melon, Musk, Netted Gem.** Small, extra early, green fleshed.
1 pkt.	" **Water, Cole's Early.** The finest garden variety.
1 pkt.	**Onion, White Portugal.** A fine early white variety.
1 pkt.	" **Prizetaker.** A large yellow-skinned, main crop sort.
1 pkt.	**Parsley, Emerald.** Curly leaves for garnishing, etc.
1 pkt.	**Parsnip, Hollow Crown.** Large, smooth white roots.
1 pt.	**Peas.** Early.
1 pt.	" Medium early.
1 pt.	" Main crop.
1 oz.	**Radish, Early Round, Dark Red.** Unsurpassed early variety.
1 oz.	" **French Breakfast.** Oval shape; red with white base.
1 pkt.	**Spinach, Victoria.** Good for spring and fall sowing.
1 pkt.	**Squash, Mammoth Summer Crookneck.** Large, yellow; early.
1 pkt.	**Tomato, Ponderosa.** Famous for large size, solidity and flavor.
1 pkt.	**Turnip, Early Red Top Strap Leaf.** Flesh white; excellent quality.

PRICE OF THE ABOVE COLLECTION, $3.50

Purchaser paying transportation. **Packed weight, 6 lbs.**

The Home Canning of Vegetables for Winter Use

Through the courtesy of Mrs. Rorer and her Publishers for the benefit of the patriotic housewife

These recipes by the acknowledged American authority on Modern Domestic Science have been selected as up-to-date specimens of many other recipes given in Mrs. Rorer's books entitled "Canning and Preserving" (Price ,75c.), "Vegetable Cookery and Meat Substitutes" (Price, $1.65), and "Mrs. Rorer's New Cook Book" (Price, $2.20), which we offer for sale. Mrs. Rorer says in her preface:

"In this age of adulteration we know not what we eat, and as canning is so simple an operation, it is unfortunate that so many people use food put up at factories.

"Before giving recipes for the canning of vegetables, I should like to impress upon my readers the importance of understanding surgical cleanliness. All vegetables are easily canned at home and kept, providing everything is sterile, which means dead. Foods that ferment have in them some form of either plant or animal life. The danger of spoiling is greater if sugar is used, or in vegetables containing sugar, as yeasts grow in saccharine solutions. One yeast plant in a can of corn will spoin the contents of the entire can. This is also true of peas and beets. Acid vegetables, as tomatoes, are easily kept, providing sugar is not added. Many housekeepers, ignorant of the chemical constituents of foods, add sugar to sour materials to sweeten them. It does not change the acid one particle. Sugar enters the stomach as sugar and the acid as acid. To neutralize or change the acid one must add an alkaline material. A teaspoonful of bicarbonate soda to a quart of tomatoes will sweeten them by neutralizing the acid.

"To have perfect success in canning vegetables, one must follow accurately the directions given. The jars must have glass or metal tops without lining. A porcelain lining leaves a space between it and the upper lid, which cannot be easily cleaned. For convenience, have a wire rack, with a centre handle made to fit a good-sized wash-boiler.

"All vegetables must be freshly gathered and carefully prepared. Not a single law or rule can be modified or overlooked."

TO CAN ASPARAGUS. Select perfectly fresh asparagus; wash it well; peel the butts and cut off the hard portion. Cover with boiling salted water, boil fifteen minutes and cool. Arrange the asparagus in wide-mouthed jars, butts down. Fill the jars with cold water, adjust the rubbers, and put the tops on loosely. Stand these in a boiler, the bottom of which is protected by a rack. Surround the jars partly with cold water, cover the boiler, and boil continuously one hour. Lift one jar at a time, screw down the lid, and cover the boiler and boil for another hour. You cannot lift the lids from any of the jars and lay them on the table, and then put them back on the jar, and have the contents keep. The lids must be screwed down without taking them from the jar.

TO CAN STRING BEANS. String and wash the beans. They may be canned whole or cut. Cover with boiling water, add a teaspoonful of salt and boil rapidly twenty minutes. Drain and pack into the jars. Fill the jars with cold water, adjust the rubbers, put the tops on loosely, and proceed exactly the same as you would for asparagus, cooking it first one hour, and then thirty minutes after the lids are screwed down or fastened.

TO CAN LIMA BEANS. Fill the jars full of young uncooked beans, then fill them full of cold water, adjust the rubbers and lay on the tops. Place the jars in a wire protecting rack, and pour in sufficient cold water to half cover them. Put the boiler over the fire, cover it closely with the lid, and boil steadily for three hours. Take up the jars, see that they are filled to overflowing, and screw on the covers as tightly as possible. Stand aside, where the air will not strike them, to cool. When cold, again screw the covers, and keep in a dark, cool place.

TO CAN BEETS. Select young, tender beets. Put into boiling water and boil for twenty minutes; cool and slip off the skins. Pack the beets into jars. Fill the jars with cold water, adjust the rubbers, put the tops on loosely, and finish precisely the same as for asparagus, cooking the same length of time.

TO CAN CORN. Corn must be perfectly fresh from the field. Remove the husks, cut the tips from the grains, or score them down the centre, and press out the pulp. Pack this pulp at once into perfectly clean glass jars, filling the jars within one inch of the top; adjust the rubbers and lay on the tops. Stand the jars in a wire protecting rack boiler and surround them with cold water. Cover the boiler, and after the water begins to boil, boil for three hours. Lift one jar at a time and fasten the top; do not lift the lid. Then add sufficient boiling water to entirely cover the jars and boil for one hour. Let them cool in the boiler, taking it, of course, away from the fire.

THE HOME CANNING OF VEGETABLES FOR WINTER USE—Continued.

TO CAN MUSHROOMS. Stem, wash and peel the mushrooms. Pack them in glass jars with glass tops; adjust the rubbers, put the lids on loosely, and stand the jars in a wash-boiler, the bottom of which has been protected with a rack. Surround them half way up with cold water. Cover the boiler; bring to boiling-point and boil continuously for one and a half hours. Lift three jars from the boiler; take the lids off and drop them in a kettle of boiling water. Fill two jars from a third. Lift the lids with a skimmer, touching them only on the edge; put them back on the jars and fasten. Stand the jars back in the boiler. When you have filled the last jar, cover the boiler, bring the water again to boiling-point and boil rapidly for twenty minutes. Lift the jars when they are cool, examining them to see that the tops are firmly fastened.

TO CAN PEAS. Select perfectly fresh green peas; shell and pack at once into clean jars. Fill the jars with cold water; adjust the rubbers, lay on the tops, and finish precisely the same as with corn, cooking the same length of time. The last boiling must be done with the jars covered with boiling water.

TO CAN STEWED TOMATOES. Scald solid and perfectly sound tomatoes and remove the skins. Cut the tomatoes into halves and press each half to remove the seeds. Cut the halves into quarters, and lay in a porcelain-lined kettle; bring to boiling-point, add salt and pepper to make them palatable, and boil thirty minutes. Have ready the jars, rubbers and lids. The rubbers should be in a dish of very hot water, the lids in a pan of boiling water, and the jars should be washed and scalded. Take an ordinary dinner or pie plate, put in the centre a piece of folded cheese-cloth or an ordinary napkin, and stand on it a jar. Take it to the fire; fill it to overflowing with tomatoes; stand the plate on the table or at the side of the stove; adjust the rubber and screw on the lid, taking it directly from the boiling water. Do not put the lid on the table, nor touch it on the inside. Stand the jars aside until cool. Wipe them and place in a clean, dry closet.

HOME DRIED VEGETABLES FOR WINTER USE

TO DRY SWEET CORN. Select perfectly fresh corn, score each row of kernels down through the centre. Press out the pulp with a dull knife; spread the pulp on wooden, granite or china plates and dry either in the hot sun or a moderate oven. When partly dry it may be transferred to boards. In this way a larger quantity may be put into a given space. When perfectly dry put into jars or tin boxes and keep in a dry, cool place.

TO DRY OKRA. The young pods constitute the edible portion of this plant, and are used principally for soups. Okra may be preserved for winter use by cutting the pods into rings, stringing them on cords and drying in the hot air; or they may be canned the same as other vegetables.

TO DRY YOUNG GREEN PEAS. Shell the peas; throw into a kettle of boiling water; boil rapidly two minutes; drain; spread in a thin layer in tin pans. Stand in a warm oven; shake frequently until thoroughly dry. Put these into bags or boxes that have been lined with waxed paper and keep in a dry place. Soak one hour before cooking.

TO DRY PARSLEY. Pick the parsley when full grown, before flowering; wash thoroughly; shake dry, tie in loose bunches, hang in the air in the sun, or put on a board to dry in a moderately warm oven. When dry, rub the leaves to a powder, and put them through a fine sieve, bottle, cork and keep in a dry, cold closet.

TO DRY PUMPKIN AND WINTER SQUASH. Pare, cut into thin strips, then into pieces. Spread on boards and dry in the sun or warm oven. Keep in tin boxes or in glass jars in a dry closet.

To cook—soak over night in cold water.

TO DRY HERBS. During the summer, when herbs are in their highest state of perfection, full of juice, just before the flowering, they should be gathered for drying. Gather them just before flowering, on a very dry day, about ten or eleven o'clock, and make sure they are quite free from dew. Shake, remove each leaf carefully from the stems, and place them on soft brown paper on a board in the hot sun; or tie in bunches and hang in the air in the hot sun; or place them in a moderately hot oven. No matter which method is selected, the herbs must be dried quickly, to retain color and flavor. When dry, rub the leaves to a powder, sift, and put them at once into bottles. Cork and keep in a dry closet. Mark the jars plainly on the outside to avoid confusion.

HENDERSON'S

GARDEN · GUIDE · AND · RECORD

INTRODUCTION

In this booklet of convenient pocket form so that it may be taken right out in the garden we have endeavored to give as concisely as possible correct cultural directions for the leading vegetables and flowers from seeds and answer in simple language many of the hundred and one questions that sometimes perplex the amateur gardener. The various topics while not exhaustive are treated in an up-to-date manner and may be quickly found by referring to the index.

AMONG THE TOPICS CONSIDERED

FLOWERS FROM SEED:
Selections for Different Purposes.
Brief Instructions How to Grow Annuals, Biennials, Perennials.
Special on Asters, Pansies and Sweet Peas, including Garden Culture. Growing Exhibition and Winter Flowering Sweet Peas.
Flower Gardens in individual colors, as the White Garden, Pink Garden, Yellow Garden, etc.
A list of Fragrant Flowers.

DAHLIA CULTURE.

HERBACEOUS BORDER:
Plans and What to Plant.

BULB CULTURE:
In Gardens, Pots and Naturalized.

GLADIOLUS AND PEONY CULTURE.

PRUNING SHRUBS:
Which Flower on New and Which on Old Wood.

LAWNS AND GRASS PLOTS:
Making, Maintaining and Renovating.
How to Eradicate Worms and Moles in the Soil and Weeds in Walks.

PREPARING GARDEN GROUND:
Fertilizing, Draining, Cultivating.

VEGETABLE CULTURE:
Brief Directions and How to Grow the Big Prize-takers.
Companion and Successive Crops.
The Fall Vegetable Garden and What to Plant.
When to Gather Vegetables at their Best for the Home Table.

VEGETABLE PLANTING TIME TABLE:
Distance, Depth to Sow. Days from Sowing until Ready to Use, etc.

CULINARY HERBS:
Culture and Harvesting.

PROTECTING VEGETABLE AND FRUIT CROPS FROM FROST BY "SMUDGING."

VEGETABLES FOR WINTER USE:
What to Grow and How to Store.

WINTER SALADS:
Witloof Chicory, etc. How to Force.

COLD FRAME VEGETABLES:
What and How to Grow for Winter Use.

INSECTS AND PLANT DISEASES:
Latest Methods of Treatment. How to Prevent Potato Scab, etc.

HOT BEDS AND COLD FRAMES:
How to Make and Maintain.

FERTILIZING:
Liming and how to tell if needed. Manure, water. How to make, where and how to apply. The Quantities of Fertilizers Required for different areas.

COOKING TIME TABLE FOR VARIOUS VEGETABLES.

CANNING VEGETABLES, ETC.:
Saving the Garden Surplus by New Methods with Home Canners.

TIME REQUIRED TO DIGEST VEGETABLES, FRUITS AND NUTS.

AND MANY OTHER PITHY GARDEN POINTERS.

ANOTHER FEATURE OF HENDERSON'S GARDEN GUIDE AND RECORD

Is the blank pages for making notes, such as the kind of vegetable, fruit or flower, date of sowing or planting, first product, continuity, quality, etc. In fact many little records should be kept in it to refresh one's mind regarding another season's gardening operations.

This booklet is sent without charge with any order of $2.00 or over, but must be requested.

PETER HENDERSON & CO.
35 & 37 CORTLANDT STREET, NEW YORK